

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449 A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Application Number: 09/219,478

Filing Date: December 22, 1998

First Named Inventor: Nichols

Group Art Unit: 2122

Examiner Name: Ingberg

Attorney Docket Number: 05222.00046

(Use as many sheets as necessary)

Sheet \_\_\_\_\_ of \_\_\_\_\_

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
JSD		US-4,622,013	11/11/1986	Cherchio	
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		US-4,961,786	01/02/1990	Dart, et al.	
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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
JSD		EPO 0 689 132 A2	12/27/95	Laffra		
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		EP 0 710 942 A2	05/08/96	Siefert		
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		WO 00/04478	01/27/00	Jonsson		
		WO 97/44766	11/27/97	Cook		
		WO 98/03953	01/29/98	Simmons		
		WO 98/25251	06/11/98	Ho		
		WO 98/32109	07/23/98	De Lange		

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Group Art Unit: 2122

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Attorney Docket Number: 05222.00046

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
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		"Automated Exercise Progression in Simulation-Based Training," IEEE Trans. On Systems, Man, and Cybernetics, Vol. 24(6), pp. 863-74, June 1994	
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		"Developing a Design System into an Intelligent Tutoring System," Int'l J. Engr. Edu., Vol. 13(5), pp-341-46, Dec. 1997	
V		"CAPTOR a model for delivering web based intelligent tutoring system technology", IEEE Proc. DASC vol. 2, pp 5.C.4.1-5	

Examiner Signature	<i>William J. Ingberg, Jr.</i>	Date Considered	30 AUG 98
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9		"Teaching Real-World Analysis Skills for Goal-Based Scenario," pp. 68-74	

Examiner Signature	<i>Silvia L. Smith</i>	Date Considered	30 AUG 05
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		"Artificial Intelligence and Mathematics Education" at <a href="http://www.rand.org/hot/mcarthur/Papers/aled.html">http://www.rand.org/hot/mcarthur/Papers/aled.html</a>		
		"The Roles of Artificial Intelligence in Education: Current Progress and Future Prospects" at <a href="http://www.nlb.unicamp.br/educacao...education/intelligent-tutoring.html">http://www.nlb.unicamp.br/educacao...education/intelligent-tutoring.html</a>		
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		"Brainmaker" at <a href="http://www.rplc.on.ca/~echoecan/28-04.htm">www.rplc.on.ca/~echoecan/28-04.htm</a>		
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Substitute for form 1449 A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Application Number : 09/219,478

Filing Date: December 22, 1998

First Named Inventor: Nichols

Group Art Unit: 2122

Examiner Name: Ingberg

Attorney Docket Number: 05222.00046

(Use as many sheets as necessary)

Sheet \_\_\_\_\_ of \_\_\_\_\_

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(S)		"A Goal-Centered Architecture for Intelligent Tutoring Systems," Proc. Of 7th World Conf. On Artificial Intelligence In Education, pp. 307-314, Aug. 1995	
		"Smart Avatars In JackMOO," Proceedings of the 1999 IEEE Conference on Virtual Reality, pp. 156-63	
		"Embedding an Intelligent Tutoring System In a Business Gaming-Simulation Environment," Proc. Of the 1994 Winter Simulation Conference, pp. 1399-1406, Dec. 1994	
		"Evaluating Intelligent Tutoring with Gaming Simulations," Proc. Of the 1995 Winter Simulation Conf., pp. 1378-83, Dec. 1995	
		"Persistent Issues in the Application of Virtual Environment Systems to Training," August 1996, Proceedings. Third Annual Symposium on Human Interaction with Complex Systems, IEEE, pp. 124-32.	
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		"Pedagogical, natural language and knowledge engineering techniques in SOPHIE I, II, and III," in Intelligent Tutoring Systems, D. Sleeman & J.S. Brown eds., pp. 227-62, Dec. 1982	
		Interactive Multimedia Distance Learning (IMDL): The Prototype of the Virtual Classroom, 1994.	
		"Understanding Organizational Dynamics of IT-Enabled Change: A Multipedia Simulation Approach," Winter 1997/1998, Journal of Management Information Systems: JMIS, Vol. 14, No. 3, pp. 109-140.	
(S)		"Intelligent Computer-Aided Instruction: A Survey Organized Around System Components," Jan. 1988, IEEE Inc., New York, Vol. 48, No. 1, pp. 40-57.	

Examiner Signature		Date Considered	30 AUG 95
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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Application Number: 09/219,478

Filing Date: December 22, 1998

First Named Inventor: Nichols

Group Art Unit: 2122

Examiner Name: Ingberg

Attorney Docket Number: 06222.00046

(Use as many sheets as necessary)

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U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
JD ↓		US-6,101,489	08/01/2000	Lannert, et al.	
		US- 6,125,368	09/28/2000	Hubbell, et al.	
		US- 6,134,638	10/17/2000	O'Connor, et al.	
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		Country Code <sup>3</sup> - Number <sup>2</sup> - Kind Code <sup>5</sup> (if known)				

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/219,478

Filing Date: December 22, 1998

First Named Inventor: Nichols

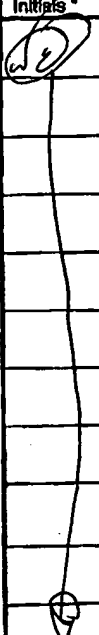
Group Art Unit: 2122

Examiner Name: Ingberg

Attorney Docket Number: 05222.00046

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		"Conducting and Supporting a Goal-Based Scenario Learning Environment," Educational Technology, Nov.-Dec. 1994	
		"Interface design issues for advising giving expert systems", Comm. Of the ACM, vol 30, no. 1, pp14-31	
		"An Object-Oriented Architecture for Evolutional Development of Interactive Learning Environment with Coached Problem-Solving," Proc. Of 1997 World Conf. On Artificial Intelligence In Education, pp. 592-64, Dec. 1997	
		"Architecture of an Intelligent Tutoring System on the WWW," Proc. Of 1997 World Conf. On Artificial Intelligence In Education, pp. 39-46 Dec. 1997	
		"Socialized Collaborative Learning in Multimedia Virtual Worlds" URL: <a href="http://www.lscs.nus.edu.sg/labs/learning/tele/VRML.html">http://www.lscs.nus.edu.sg/labs/learning/tele/VRML.html</a> ; viewed Feb. 16, 1999	
		Flexible Learning, Feb. 1998, Credit Union Management Vol. 21, No. 2, pp. 32-33+	
		"Teaching Through Case-Based Reasoning: An ITS Engine Applied to Business Communication," Proc. Of 1997 World Conf. On Artificial Intelligence In Education, pp. 111-18 Dec. 1997	
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		"Intelligent Tutoring Systems: An Overview" at <a href="http://www.intellectbooks.com/authors/fawcett/its.htm">http://www.intellectbooks.com/authors/fawcett/its.htm</a>	

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Application Number: 09/219,478

Filing Date: December 22, 1998

First Named Inventor: Nichols

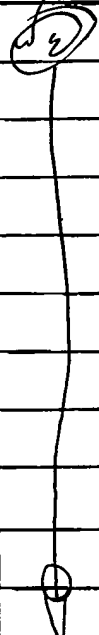
Group Art Unit: 2122

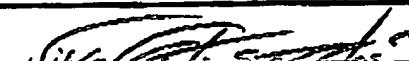
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Attorney Docket Number: 05222.00046

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		"No More Boring CPE," July 1997, Accounting Technology, pp. 27-31	
		Computer Dictionary, 1997, pp. 264, 276, 383, 446, 462, 507.	
		"Rule-Based Programming with OPS5" at <a href="http://www.mkp.com/books_catalog/O-634613-51-6.asp">www.mkp.com/books_catalog/O-634613-51-6.asp</a>	
		"From Computer-Assisted Instruction to Intelligent Tutoring Systems," J. Artificial Intelligence in Education, V. 2(3), pp. 39-60, Dec. 1997	
		"MUSE U.S. Patents" at <a href="http://www.muser.com/html/patents.html">www.muser.com/html/patents.html</a>	
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		"Using the Wizard of Oz Technique to Prototype a Scenario-Based Simulation Tutor," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 458-65, Dec. 1997	
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		"An Electronic Infrastructure for a Virtual University," Communications of the ACM, Vol. 40, No. 9, Sep. 1997.	
		"Simulation Technology and Parallelism in Learning Environments" at <a href="http://www.to.uhwaia.nl/prj/min/Book/chapter1.htm">http://www.to.uhwaia.nl/prj/min/Book/chapter1.htm</a>	

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Substitute for form 1449 A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Application Number: 09/219,478

Filing Date: December 22, 1998

First Named Inventor: Nichols

Group Art Unit: 2122

Examiner Name: Ingberg

Attorney Docket Number: 05222.00046

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WZ		"Engines for Education" URL: <a href="http://www.ils.msu.edu/~e_for_e/nodes/I-M-INTRO-ZOOMER-pg.html">http://www.ils.msu.edu/~e_for_e/nodes/I-M-INTRO-ZOOMER-pg.html</a> ; viewed Feb. 15, 1999.	
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		"Computer Aided Instruction for Statistics: A Knowledge-Based Systems Approach," Int'l J. of Computers in Adult Education and Training, Vol. 5(1), pp. 3-14.	
		"Teaching with the Internet" 1996, JAI Press Inc., USA, Vol no. 3, pp 217-222	
		"Development of a Simulation-Based Intelligent Tutoring System for Assisting PID Control Learning," Jan. 1994, IEICE Transactions on Information and Systems, E77-D, No. 1, Tokyo Japan, pp. 108-17.	
		"Authoring Intelligent Tutoring Systems: An Analysis of the State of the Art" at <a href="http://www.cs.umass.edu/~tmurray/papers/ATSummary/AuthTools.html">http://www.cs.umass.edu/~tmurray/papers/ATSummary/AuthTools.html</a>	
		Multimedia Training "Get Lemonade, Not a Lemon!" June 1987, Journal for Quality and Participation vol. 20, No. 3, pp. 22-26	
		"SMART Evaluation: Cognitive Diagnosis, Mastery Learning & Remediation," Proc. Of 7th World Conf. On Artificial Intelligence in Education, pp. 123-30, Aug. 1995	
		"Decision Pro3.0" at <a href="http://www.vanguardaw.com/">www.vanguardaw.com/</a>	

Examiner Signature		Date Considered	30 AUG 05
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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Application Number: 09/219,478

Filing Date: December 22, 1998

First Named Inventor: Nichols

Group Art Unit: 2122

Examiner Name: Ingberg

Attorney Docket Number: 05222.00046

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J2		"A Fuzzy Logic-Based Intelligent Tutoring System," Information Processing 92, Vol. II, pp. 66-72, Dec. 1992.	
		"The SimQuest Authoring System for Simulation-Based Discovery Learning," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 79-86, Dec. 1997	
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		"Goal-Based Scenarios and Business Training: A Conversation with Roger C. Schank," Educational Technology, Nov.-Dec. 1994	
		"Automate Your Business Plan" at <a href="http://www.business-plan.com/screen2.html">www.business-plan.com/screen2.html</a>	
		"Kiplinger TaxCut Press Releases" at <a href="http://www.taxcut.com/taxcut/88press_releases/pr98_nowshipping.html">http://www.taxcut.com/taxcut/88press_releases/pr98_nowshipping.html</a>	
		"TurboTax Deluxe Product Information" at <a href="http://www.intuit.com/turbotax/productinfo/ttdlx.html">http://www.intuit.com/turbotax/productinfo/ttdlx.html</a>	
		"Why Should the Teens Have All the Best Games? Management Skills with Oil, Health Housing Games," Computergram Int'l, June 176, 1996	
		"Template Software Business Simulator, Chapter 8, August 1997	
	"Template Software Workflow Simulator, Chapter 8, June 1998		
9		"Goal-Based Scenarios", Technical Report # 36, Northwestern University, The Institute for the Learning Sciences, December 1992, pp. 1-30	

Examiner Signature	<i>[Signature]</i>	Date Considered	30 AUG 05
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PTO/BB/08A (10-01)

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Application Number: 09/219,478

Filing Date: December 22, 1998

First Named Inventor: Nichols

Group Art Unit: 2122

Examiner Name: Ingberg

Attorney Docket Number: 05222.00046

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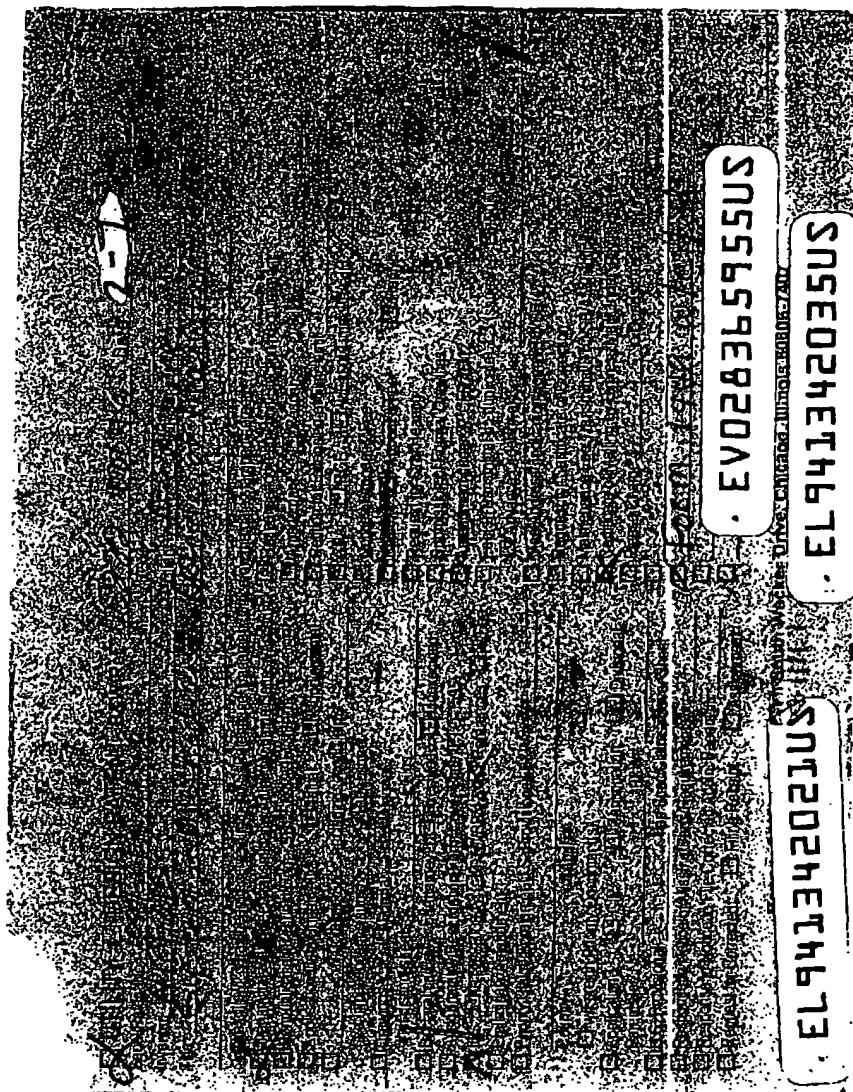
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		"Eight Goal-Based Scenario Tools", Technical Report # 67, Northwestern University, The Institute for the Learning Sciences, January 1996, pp. 1-37	
		"A Role for AI in Education: Using Technology to Reshape Education", Northwestern University, The Institute for the Learning Sciences, Journal of Artificial Intelligence in Education, Winter 1990, January 1990, pp. 1-24 and 2 pgs. of references	
		"The Design of Goal-Based Scenarios", Technical Report # 39, Northwestern University, The Institute for the Learning Sciences, March 1993, pp. 1-58	

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